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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,177	01/11/2002	Jean-Pierre Rombeaut	Q68009	5963

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EXAMINER

BHATIA, NEERAJ R

ART UNIT PAPER NUMBER

2661

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/042,177	<b>Applicant(s)</b> ROMBEAUT ET AL.	
	<b>Examiner</b> Neeraj Bhatia	<b>Art Unit</b> 2661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because figures 2 and 3 need descriptive labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract of the disclosure is objected to because "said" on line 13 and 14 should be deleted. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the phrase "CORBA type" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "CORBA type"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1,3, and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushima (Pat No. 6,049,524). Regarding claim 1, Fukushima includes a router 10, in Fig 1, made up of two router modules 11a and 11b, only one of which is active. The other being in a standby state with a changeover means making it possible to cause it to

go from a standby state to an active state when the router module in the active state stops (column 7 lines 46-49 of the Detailed Description of Embodiment). Furthermore, the router is connected to neighboring routers (Fig 3) and the router modules have state machines associated to the neighboring routers. Also note when the routing module is in the active state, it has data storage means to hold information about the state of the state machines associated with the neighboring routers (column 8 lines 55-65 of the Detailed Description of Embodiment) and the other router is capable of retrieving the data relating to the state of the state machines associated with the neighboring routers (column 7 line 61 to column 8 line 13 of the Detailed Description of the Embodiment).

With respect to claim 3, Fukushima discloses an internal bus 12 in Fig 1 that enables the router modules 11a and 11b to communicate with each other.

Regarding claim 5, Fig 8-11, as described in column 10 line 13 to column 11 line 15 of the Detailed Description of the Embodiment, disclose the process the router modules take to have means for storing data relating to the associated neighbor router when the neighbor router is created, and means for retrieving the data when a changeover to the active state takes place.

With regards to claim 6, a stable state in the Fukushima reference 'Start' is equivalent to the state "Down".

Also note, in claim 7, the router in Fukushima includes a stable state from a list comprising of the states in claim 6 and a state after a Database Description Packet exchange.

Regarding claim 8, Fukushima discloses that OSPF is used as the routing protocol (column 5 lines 27-32 of the Detailed Description). Using this protocol, routers exchange routing protocol packets with other routers connected to the networks. The routers have memory to hold the network link-state information. Once two routers exchange their network information using the OSPF protocol, they will have the same network information, thus being in the "Full" state. Also note, in column 10 lines 16- 51 in the Detailed Description, Fukushima discloses the process involved in updating and adding stored data when a router has had changes in network information occur.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima in view of Tsukakoshi.

Fukushima does not disclose a shared memory that is shared between the router modules to hold the data relating to the states of the state machines. However, Tsukakoshi, in Patent No. 6,577,634, discloses a router with a plurality of route calculation units, which may share the network information (column 10 line 66 to column 11 line 13 in the Description of the Embodiments). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Fukushima a shared

memory as suggested by Tsukakoshi in order for the routing modules to share the network information. This makes the routers appear as if they were one router.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima in view of Couturier.

Fukushima includes a router as stated above, but does not include a software bus of the CORBA type as the inter-process communications means for the routing modules. However, Couturier in Patent No. 6,073,184 discloses a software bus 8 in Fig 1 that complies with the CORBA specification published by OMG (column 1 lines 14-17 and in column 6 lines 22-28). The software bus used by Couturier is used to deliver requests to the objects concerned, which are distributed over various data processor units, and to return the output values to the client objects. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Fukushima a software bus of the CORBA type as suggested by Couturier in order to enable the objects to communicate with each other simply by submitting requests independently of their situation on the network.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lau (Pub No. US 2003/0046604 A1) shows a router comprising of an active processor and a standby processor. The standby processor takes over as the active processor upon failure of the active processor. Lau also includes inter-processing means of communication between the two processors in order to update the

standby processor. Also note, Lau includes a means for storing the updated protocol information. Jensen (Pub No. US 2002/0186653 A1) includes an active and standby network node, with changeover means enabling the standby network node to take over if the active node fails. The nodes are interconnected by a bus and have a means for storage. Ren (Pub No. 2003/0056138 A1) discloses two processors, one of which is active and the other in standby, using the OSPF routing protocol. The standby processor takes over upon failure of the active processor. Ren also discloses a means for the two processors to communicate along with a data storage unit. Watson (Pub No. US 2002/0167952 A1) includes two processors, only one of which is in the active mode, while the other is in standby mode. The standby processor capable of taking over if the active processor fails, and the two processors are capable of communicating with each other. Watson also includes a means for storage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neeraj Bhatia whose telephone number is (571)272-5204. The examiner can normally be reached on Monday through Friday: 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571)272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

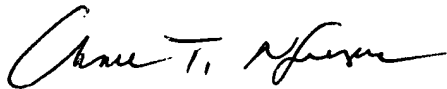


Art Unit: 2661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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